BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII

In the Matter of the Application of)

HAWAIIAN ELECTRIC COMPANY, INC.)

HAWAII ELECTRIC LIGHT COMPANY, INC.)

MAUI ELECTRIC COMPANY, LIMITED)

DOCKET NO. 2008-0303

For Approval of the Advanced
Metering Infrastructure (AMI)
Project and Request to Commit
Capital Funds, to Defer and Amortize)
Software Development Costs, to Begin)
Installation of Meters and Implement)
Time-of-Use Rates, for Approval
of Accounting and Ratemaking
Treatment, and Other Matters.

ORDER CLOSING DOCKET

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ORDER CLOSING DOCKET

By this Order, the commission denies HAWAIIAN ELECTRIC COMPANY, INC., MAUI ELECTRIC COMPANY, LTD., and HAWAII ELECTRIC LIGHT COMPANY, INC.'s (collectively, "HECO Companies") requests in their letter dated May 4, 2010, dismisses the application filed on December 1, 2008, without prejudice, and closes this docket.

I.

Background

In their application filed on December 1, 2008, the HECO Companies commission approval of the following:

(1) to commit capital funds in excess of \$2,500,000 (estimated at \$41,229,000 for HECO, \$10,606,000 for MECO, and \$13,190,000 for HELCO) for the Advanced Metering Infrastructure ("AMI") project as discussed in Section X;

- (2) to defer certain computer software development costs (i.e., the "Stage 2" or "Application Development" costs, including the costs of designing, acquiring, installing and testing the computer software) for the Meter Data Management System ("MDMS") and accrue an allowance for funds used during construction ("AFUDC") during the deferral period (total deferred costs are estimated at \$9,134,000 for HECO, \$2,021,000 for MECO, and \$2,385,000 for HELCO) described in Sections X and XI;
- (3) to amortize the MDMS deferred costs (including AFUDC) over a 12-year period (or such other amortization period as the Commission finds to be reasonable), and to include the unamortized deferred costs (including AFUDC) in rate base, as is further explained in Sections X and XI;
- (4) of cost recovery for ratemaking purposes of the remaining book value of its existing meters (that will be replaced with advanced meters) in the following manner for each of the Companies (discussed in Section XI):
 - (a) HECO beginning with the receipt of the Commission's Decision and Order on a straight-line basis over a period of three years for HECO,
 - (b) MECO beginning with the receipt of the Commission's Decision and Order on a straight-line basis and ending when MECO's meter installation begins, and
 - (c) HELCO beginning with the receipt of the Commission's Decision and Order on a straight-line basis and ending when HELCO's meter installation begins;
- (5) of cost recovery for ratemaking purposes of the capital costs associated with the purchase and installation of the new AMI meters over a seven-year period on a straight-line basis (discussed in Section XI);
- (6) for immediate approval to begin installing, on a first-come, first-served basis, advanced meters for all customers that request them and to implement time-of-use ("TOU") rates on an interim basis for customers requesting the installation of advanced meters as discussed in Sections II and XII;

- (7)for expedited approval of proposed Schedule TOU-R (Residential Time-of-Use) rates for HECO, HELCO, MECO (all three divisions) and proposed Schedule TOU-G Time-of-Use (Small Commercial Service), Schedule TOU-J (Commercial Time-of-Use Service) and Schedule TOU-P (Large Time-of-Use Service) rates for HELCO and MECO (all three divisions) (described in Section XII);
- (8) to recover all of the Companies' incremental cost associated with the AMI Project through the Renewable Energy Infrastructure Program ("REIP") surcharge ("REIP Surcharge") that is pending approval in Docket No. 2007-0416 or an AMI surcharge ("AMI Surcharge") mechanism approved by the Commission in this proceeding (discussed in Section XI);
- (9) of for approval the Advanced Metering Infrastructure Equipment and Services Agreement ("Sensus Agreement") between the Hawaiian Electric Company, Inc. and Sensus Metering Systems, Inc. ("Sensus") including its terms and conditions and a finding that the arrangement is prudent and in the public interest, and a determination that the Companies may include all costs, fees and related taxes to be paid by the Companies pursuant to the revenue Agreement in its requirements ratemaking purposes and for the purposes of determining the reasonableness of the Companies' rates (described in Exhibit 1 and discussed in Section VII): and
- (10) for recovery of lease expenses (based on lease payments over the term of the agreement) for the Sensus-owned, two-way radio frequency network infrastructure ("AMI Network") (the AMI Network is described in Section VII and the lease expenses are discussed in Section XI).

Application, at 1-4.

On April 21, 2009, the commission granted intervenor status to HAWAII SOLAR ENERGY ASSOCIATION ("HSEA"), HAWAII RENEWABLE ENERGY ALLIANCE ("HREA") and LIFE OF THE LAND ("LOL"),

and on April 21, 2009, the commission approved the Parties¹ proposed stipulated procedural order with modifications. Under the terms of the Stipulated Procedural Order, the evidentiary hearing for this docket was scheduled for the week of September 28, 2009.

By letter dated and filed August 28, 2009, the HECO Companies requested that the date for the evidentiary hearing be moved to the week of June 21, 2010, to allow the HECO Companies to "assess the impact" of ongoing developments in the "Smart Grid, Customer Information System ('CIS') and Cyber-Security areas." The commission granted the request in a letter dated September 14, 2009, and set new deadlines for this proceeding, including the date of the evidentiary hearing, which was set for the week of July 12, 2010.

Concerned with the progress of the docket, the commission set a status conference for April 13, 2010. At the status conference, the HECO Companies requested the opportunity to propose a revised procedural plan to address issues raised in the docket. By letter dated April 15, 2010, the commission, based on statements made at the status conference, directed the HECO Companies to submit their proposal by May 4, 2010, and set May 11 2010, as the deadline to file responses to the HECO Companies' proposal.

^{&#}x27;The Parties are the HECO Companies, HSEA, HREA, LOL and the DIVISION OF CONSUMER ADVOCACY, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS ("Consumer Advocate"), an ex officio party to all commission proceedings.

²Letter dated and filed August 28, 2009, from the HECO Companies to the commission.

On May 4, 2010, the HECO Companies filed their proposal, which consisted of a request to: 1) conduct Extended Pilot Testing³ for the AMI Project; 2) suspend the remaining procedural steps scheduled in the docket pending the completion of the proposed Extended Pilot Testing; 3) defer certain costs related to the Extended Pilot Testing; and 4) provide an update on developments in the Smart Grid, CIS and cyber-security areas ("Request").

On May 11, 2010, the Consumer Advocate, HSEA, HREA and LOL filed their respective responses to the HECO Companies' May 4, 2010 filing.

Letter dated May 4, 2010, from the HECO Companies to the commission, at 1-2.

^{&#}x27;According to the HECO Companies:

Extended Pilot Testing includes (1) the installation of approximately 5,000 additional AMI meters (at estimated capital cost of \$652,651), (2) installation of two 'mini-TGB' network devices (at an estimated expense of \$30,000) to supplement the five existing Tower Gateway Base Stations ("TGBs") installed pursuant to prior AMI pilot activities, (3) the installation of a Meter Data Management System ("MDMS") for the extended pilot testing, which will involve (a) installing additional computer server capacity (at an estimated capital cost of \$43,600), (b) a software hosting fee, which includes all MDMS vendor hosted services and materials such as MDMS licensing fees, MDMS installation and configuration, and support and maintenance fees (at an estimated expense of \$250,000), and (4) cyber-security and technical support consultant costs (at an estimated expense of \$500,000 and \$250,000, respectively).

Discussion

In its May 4, 2010 filing, the HECO Companies seek to conduct Extended Pilot Testing "to provide a comprehensive test and evaluation process, where applicable performance criteria will be addressed." According to the HECO Companies, the Extended Pilot Testing will provide "additional time and opportunity necessary to (1) plan for integration with a new CIS, (2) assess the role of AMI in Smart Grid initiatives and (3) identify and address cyber-security concerns, all of which are pre-requisites for large-scale AMI deployment."

Like the Consumer Advocate, the commission is supportive of the concept of AMI and a "smart grid" as a means of reducing the state's dependence on fossil fuel in favor of clean energy, but is concerned about the propriety of "allow[ing] a pilot program to occur during what is ostensibly a capital improvement project. Generally, any pilot programs should occur prior to the application, rather than during the application."

The commission is also concerned that the Extended Pilot Testing, which will not be completed until 2011, raises additional concerns about the cost effectiveness of the Project. In addition, some of the Parties have raised concerns about the Project as a whole. For example, HSEA is "concerned that the HECO Companies have not offered a robust justification for the

^{&#}x27;Letter dated and filed May 4, 2010, from the HECO Companies to the commission, at 2.

⁵Letter dated and filed May 11, 2010, from the Consumer Advocate to the commission, at 2, 4.

choice of the mesh network communications-based system relative to other alternatives" and that "proceeding with the proposed Extended Pilot runs the risk of further locking in a potential sub-optimal choice." Likewise, the Consumer Advocate expressed concern that there were "significant unanswered questions" that the Extended Pilot Testing may not be able to answer, such as the relationship between AMI and the CIS since "if the CIS is not yet operational and/or not capable of integration with the AMI and MDMS without significant effort and/or cost, the investment made into the AMI project will be an expensive and possibly ineffectual investment made." HREA also questioned whether the HECO Companies were "putting the 'cart before the horse.'"

Accordingly, the commission is disinclined to approve the HECO Companies' May 4, 2010 Request to: 1) conduct Extended Pilot Testing for the AMI Project; 2) suspend the remaining procedural steps pending the completion of the proposed Extended Pilot Testing; 3) defer certain costs related to the Extended Pilot Testing; and 4) provide an update on developments in the Smart Grid, CIS and cyber-security areas. As the HECO Companies are presumably unable to proceed with their Application without

^{&#}x27;Hawaii Solar Energy Association's Response to the HECO Companies' Proposal for a Revised Procedural Plan, filed May 11, 2010, at 3.

^{&#}x27;Letter dated and filed May 11, 2010 from the Consumer Advocate to the commission, at 3.

^{*}HREA Response to HECO Procedural Plan, Request to Defer Certain Costs of AMI Extended Pilot Testing and Update on Developments, filed on May 11 2010, at 2.

the Extended Pilot Testing, the commission dismisses the Application without prejudice and closes this docket.

The commission is cognizant that HREA in its May 11, 2010 filing requested that the commission "direct the HECO Companies to draft an AMI/Smart Grid Framework for review by the Parties." Given that this request was made in a responsive filing without opportunity for rebuttal by any other Parties, the commission declines, based on the current record, to direct the HECO Companies as requested by HREA.

The commission, however, notes that the HECO Companies have stated that they are working on Smart Grid Roadmaps. In the commission's view, any new AMI or preferably AMI/smart grid application should include or be preceded by an overall smart grid plan or proposal filed with the commission.

III.

Orders

THE COMMISSION ORDERS:

- 1. The HECO Companies' Request filed May 4, 2010, is denied.
- 2. The Application filed on December 1, 2008, is dismissed without prejudice.
- 3. This docket is closed unless ordered otherwise by the commission.

PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII

Caliboso, Chairman

Leslie H. Kondo, Commissioner

APPROVED AS TO FORM:

Commission Counsel

2008-0303.laa

CERTIFICATE OF SERVICE

The foregoing order was served on the date of filing by mail, postage prepaid, and properly addressed to the following parties:

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